

Hart deal with the production of volatile fatty acids and esters in the making of cheddar cheese. The acids found were acetic, propionic, butyric, and caproic, but not valeric acid; none of these seemed to be formed from lactose, although the ethyl alcohol probably was obtained from this compound. Mr. McCollum describes how he succeeded in keeping rats alive for a considerable time on a ration containing inorganic phosphorus compounds and no purine bases; it was necessary for success that the ration should be varied as widely as possible in order to make it palatable. Young rats withstood the unpalatability for a long time, and, indeed, were healthy to the end of the experiment. He concludes that animals can synthesise their complex phosphorus compounds, including nuclein, from inorganic compounds, and, further, that they can synthesise the purine bases from some complex present in the protein molecule. In the last paper of the series Messrs. Hart and Tottigham show the presence of phytin in seeds of maize, oats, and barley. This substance is a complex combination of potassium, magnesium, and calcium with phytic acid, $C_6H_5P_2O_8$, which in turn is broken up on hydrolysis to form inositol and phosphoric acid.

TREE PLANTING IN TOWNS.¹

THE tree, standing singly, collected in masses forming woods, or grown as a beautiful avenue, is a fascinating object of study once the attention has been arrested upon it. Difficult it is to realise that an object of such size, majesty, and strength as a fine old tree represents has sprung from a tiny seed—a seed which if placed in the palm of the hand may, to the non-expert, prove indistinguishable from the seed of a small herb or grass of the field. Yet in the one case the tiny seed contains within it the germ which will produce a green monument of 100 to 200 feet or more in height, a living monument which will withstand the storms and changes of centuries, and may witness the downfall and uprise of dynasties and nations. Its seasonal garb does not pass through the kaleidoscopic changes of fashion which man in these later days is heir to.

The tree has but the four changes of garment which appear regularly with the changing seasons throughout its life, but this raiment has never failed in its attraction for man. Beautiful as are the tender greens of spring, the deeper, more mature greens of summer, and the brilliant tints of autumn, he who studies trees finds something equally beautiful, even if not more beautiful, in the stern grandeur, with its latent promise of strength, exhibited in winter.

The tree has had a greater influence in the training and civilisation of mankind than is perhaps generally realised, certainly more than is realised by the man of the city and town. Long centuries ago the greater portion of the land of the globe was covered by vast primeval forests in which man lived a primitive existence, and against which he waged an unequal war. But he was dependent upon the forest for the greater part of his means of subsistence, whilst his house, furniture, cooking utensils, such as they were, and implements, offensive, defensive, and cultural, were all fashioned from the materials of the forest.

As man increased in number and became more civilised, he cleared larger and larger areas of the tree growth, and now took to living outside, but still in the neighbourhood of, the forest. Still he depended upon the forest for most of the necessities of life, from the materials for constructing his house down to a chief portion of his daily food.

It was only with the great increase in number of mankind and with his concentration in certain localities, usually the fertile lowlands from which the forests had been cleared, that these sections of the human race began to depend less and less on the forest as one of the chief staffs of life.

But we see that the instinct of man in the earlier days in the history of the world was to look to the forest as nature's great storehouse from which he could obtain the necessities of his daily life. It is so with the nomadic

tribes of the world at the present day. I wish to make this point, as it explains, I think, the inherent love of trees which lies in the nature of each one of us, though in the city-bred man it may to some extent remain dormant.

It explains another point, on which I propose to briefly dwell, the instinct of man, if left to himself in a bare, treeless region to plant trees or tree growth, or bushes even, to brighten the monotony of his otherwise dreary surroundings. For those of us who have experienced nature in its awesome loneliness in the absence of tree growth of any kind, know full well how appallingly depressing it can become.

In such localities man, if left to himself, will, I say, start planting trees, and will take extraordinary trouble to make them grow. Some years ago I was deputed by the Government of India to visit Quetta, the beautiful capital of Baluchistan—that rugged province situated in the far north-west of India on the frontier of Afghanistan and Persia. Quetta occupies the central Highland of Baluchistan, and is a point of considerable military strategic importance. It is situated at about 5500 feet, and is surrounded by great barren peaks ranging up to 11,700 feet. The railway climbs to it through a dreary rugged waste of rock and sand, with here and there little villages embosomed in trees and surrounded with small areas of crops. It is a wild country, and the history of Quetta fully illustrates my point that man in such a country will plant trees for dear life.

The main station of Quetta was formed after Lord Roberts's march to Kandahar. At the time the first houses were built, save for the fact that the villages around contained some poplars and willows and fruit trees, the site consisted of a barren plain. The planting was first started in 1878 by Mr. Bruce. After the evacuation of Kandahar, the work was taken up mainly by Mr. (now Sir Hugh) Barnes, General Sir Stanley Edwardes, who was in command of the troops, Colonel Gainsford, and Mr. Watson, the forest officer. A tree committee was formed, and large nurseries established. The trees were obtained from Kandahar, a beginning being made in the winter of 1881–2, when some 60,000 cuttings or slips of the chenar or plane tree, poplar and willows, were brought on camels from Kandahar and planted out along the roadsides and in the gardens. The planes were put on the main road, the Lytton Road. They form a magnificent avenue, now thirty years old, which gives a most grateful shade in summer, considerably lowering the temperature. The growth of the trees was wonderfully rapid, irrigation being then, as now, employed to water them; for all the water in the country is brought in channels from the sources of the springs, its value being fully understood by the inhabitants, who show great ingenuity in constructing these water channels. Other roads were lined with poplars or willows, and if a mistake was made it was in planting the trees too close, and in planting the avenues on any one road of one species of tree only; and this mistake had to be paid for later on somewhat dearly, to which allusion may be made. The trees were attacked by a cerambyx beetle pest (*Eolesthes sarta*) the grubs of which fed in the green inner bark—the growing layer—of the trees, and resulted in numbers of the poplars and willows having to be cut out and burnt.

Not only in Quetta, but also in all the cantonments throughout Baluchistan, the planting of trees forms one of the chief recreations of the British community, so great is the distaste of mankind, accustomed and used to tree and plant growth, to exist without it. The whole of the work is carried out by the political and military officers stationed in that portion of the country, few if any of whom had, before reaching the country, any planting knowledge, and many of whom had confessedly previously taken but little interest in the growth of trees. Amongst the most enthusiastic of the planting community at the time of my visit was General Sir Henry Smith-Dorrien, now commanding at Aldershot, but then commanding the Quetta division, and he attacked and wiped out the "borer," as they called the beetle pest, in his cantonments with as much keenness as he planted trees.

I have alluded to the fact that the major portion of the land surface of the globe was formerly clothed with vast primeval forests.

In the opening phases of his connection with the forest

¹ Paper read at the Town Planning Exhibition in the Royal Academy Buildings, Edinburgh, March 23, by E. P. Stebbing, Lecturer in Forestry, University of Edinburgh.

man waged a puny and ineffective war against the relentless growth of the forest, and had as much as he could do to keep a small clearing round his abode, and in many cases this was not attempted. Regions in the tropical world exist at the present day where this unequal and never-ending strife between man and the luxuriant vegetation of the forest still goes on, usually in favour of the forest. With increase of numbers, permanent clearings came into being, but the whole of the materials for house-building, &c., came from the forest. At the present day the aborigines of Central India and the Assam and North Burma Hills, as is the case with aborigines in other parts of the world, construct their habitations of wood, grass, and leaves; their household crockery and glass consists of gourds, with lengths of bamboo for the wineglasses, whilst a considerable portion of their food consists of edible fruits and roots and leaves and shoots of forest trees, and when they can procure it, meat from the wild animals of the same forest.

But man, with increased numbers and civilisation, began a ruthless war against the forest, and is still carrying it on in America, Canada, and elsewhere, with the result which now faces us. In Great Britain, once covered with forests, we have no forests at all and few woods of any size, and are at the present moment entirely dependent on our timber, &c., supplies being brought to us from outside. And the sources of this supply are diminishing, and are also being yearly indented on to a greater extent by other countries.

But long before the awakening as to the importance of forests commenced in Europe—a matter of a century or two only—man, the man in the rapidly growing cities and towns, had realised the importance of the tree and the place the tree held in his existence. His primitive instincts, laid to rest whilst engaged in ruthlessly exterminating his friend, were aroused into an active repentance when he no longer had that friend at his door and could no longer watch it garb itself in its brilliant seasonal changes of raiment, and no longer had its protection for himself and his animals against cold or fierce winds, a hot sun, &c. He then commenced, after the fashion of man, energetically, but more or less spasmodically, to endeavour to repair the effect of his own destructiveness. To his surprise, however, he found it was by no means so easy to replace the trees on spots from which he had ruthlessly cut them. Nature's balance had been unduly interfered with; the rich store of good soil built up through the ages in her own storehouses of the past had been wastefully dissipated, and whereas she herself never asked the trees to grow on bed-rock, man did.

Also, as time went on, the atmosphere, especially in the larger cities and commercial centres, became polluted and vitiated with smoke and acids, and man, having no time or wish to study the methods by which nature reclothes the soil when left to herself after he had passed by, gave up his attempts to maintain trees near or within the areas, rapidly increasing in density of population, in which he worked and lived.

We thus arrive at another stage in the history of man and the tree. The city increased in size; the population doubled, trebled, and quadrupled itself; the single-room tenement, as we were shown by Lord Pentland the other day, made its appearance and came to stay; the streets became narrower, the houses higher, and the tree itself disappeared. If we look at the large densely populated capitals of Europe and the great commercial centres of the present day, we find in both that in the parts occupied by the poor classes and workers the significance of the tree as the close neighbour and companion of man throughout a considerable portion of his existence on the globe has been forgotten or lost to view. But the instinct is there, deep implanted in the heart of each one. Even to the born and bred city child, the descendant of several generations of town-bred men, the craving for a sight of a green field or of a wood comes dimly at times. Probably most of us who are acquainted with great cities have come across instances of such. It was my fortune once to see a little youngster from the slums of London taken into a Kentish hop-field. He came from one of the worst parts of the great city, and in all his little life had only seen a grimy plane tree and a dark, sooty green grass plot. In the train, so soon as the open country had been reached, he

remained speechless. Once in the hop-gardens he recovered his voice, and went wild with excitement and delight. It was very easy to see man's instinctive love for wild nature and nature's growth there. Equally apparent is it in most of us born and bred in civilised countries when we come face to face for the first time with a tropical forest. Instincts and thoughts to which we fail to give expression surge up within us as we feel that once again we have come into contact with the original homes of our ancestors; and the feelings, mind you, which are aroused by such a contact, which were aroused in that little London lad in the hop-garden, are the very ones which it is to the interest of mankind to keep alive and stimulate.

Mankind does not seem to improve with his growing habit of congregating in dense masses in cities and towns. He appears, somehow, to lose something of that freshness and breeziness which we associate with the mountain top and find in the dweller on the mountain top. In our more spacious, if less civilised and cultivated, days, we lived in closer touch with nature, and there are those who say that in many ways we were better men for the contact. But the closer life in cities is doing something which, as I think, is even worse for human nature than this. We are losing some of the finer instincts, and certainly our finer senses of sight and hearing, and even of smell. I do not speak from any medical knowledge of the subject, but simply from personal observations made during a number of years' contact with the folk of the jungles and mountainous regions of India. They can give us points and a beating in all of the last three; and yet there is no reason to suppose that our ancestors—the ancient Britons, who dressed in blue paint—were not possessed of these finer senses and were not the equal, in these respects, of the present-day aborigine.

Of course, I do not wish to be understood as saying that the town- and city-bred man can hope to remain the equal of the countryman in his knowledge of nature or in those senses which demand to be constantly used to be kept in high order. But my point is that a good deal more might and should be done to help the dweller in the densely populated portions of the great cities and commercial centres to keep to some extent in touch with nature. He should be able to see and live with trees, and to see daily, not only on holidays or at the expense of a long walk, which he will not take, trees and areas of green grass and flowers. We who live in the open air and habitually enjoy such sights, and those who spend several weeks or months in the year annually in the country, find it difficult to picture the mind of a child who has never seen a field of corn and red poppies rippling under the soft summer wind, or the waving tops of a green forest, or heard the sighing of the breeze in a pine wood; and yet there are probably hundreds and thousands such in these islands.

Now it should be quite possible for the rulers of every large city and town to see that open spaces are provided for the recreation of the inhabitants. Much has and is being done in this respect, and this exhibition is a witness to all it is hoped to do in the future. But I am not concerned here with the provision of the open spaces, but with tree planting and the beautifying, not only of the open spaces, a comparatively easy matter, but of the streets and their neighbourhood. When we talk of trees in streets, the usual idea is, I think, an avenue. Those who have seen the beautiful lime avenue at Trinity College, Oxford, know what a beautiful thing it is. An avenue is a very beautiful thing. But there are many streets far too narrow to take an avenue, and yet it is quite possible that there may be a situation at one or both ends where a tree or a clump of trees can be put; and picture the difference such a clump, changing in colour with the season, will make to the amenity of the street. Or there may be one or more small gardens where small trees or bushes and flowering shrubs might be grown, where bright green grass bands or plots may be put, and which if kept in order can be maintained bright and beautiful. Such clumps and bushes and grass bands and plots are, we know, the natural concomitant of the homes of the more well-to-do portion of the community. But so are they often the accompaniments of the better parts of the city and town. On the Continent, for instance, you do not

want for beauty in the fine boulevards to be found in Paris or Brussels; the Unter den Linden is a thing of beauty in spring in Berlin, whilst the famous Ring of Vienna is as fine a piece of city tree decoration as you could wish to see anywhere.

In these islands we are far behind the Continent so far as the beauty of our streets go. Boulevards as understood on the Continent are entirely absent from most of our big cities. In the exhibition I see on the wall two fine sketches of new proposed roads in Liverpool. These are laid out in the proper spirit, and certainly not one of the least important parts of town planning is the laying out of spacious tree-bordered roads, or even better, because more picturesque, if space is available, with a double line of trees and a walk down the centre of the road, like the Unter den Linden in Berlin. Parks and open spaces we have in our great cities, and very beautiful many of them are. In many cases they are, however, situated at considerable distances from the densely congested poorer parts of the town.

Here in Edinburgh, a city the natural advantages of the setting of which it would be difficult to beat, I can picture George Street as having a very different appearance with a fine green row of trees down each side. I think the addition of a row on the shop side of Princes Street would add beauty to one of the finest streets in Europe, whilst, to mention others, Hanover Street, Frederick Street, and the other streets running off up the slope would look infinitely more picturesque with trees on either side; and once the trees were up they would break the force and chill of the most persistent prevailing wind I have met! But it is not only in the wealthier part of the city that work of this nature should be carried out. Trees should be planted in lines or clumps or as single trees in the poorer and more densely populated quarters of the city. It should not be possible for a child to grow up in any quarter of a city without being in daily contact with trees and plant growth. It should be rendered possible for the town-bred child to know the changes of seasons, not merely by temperature only, but by recognising the early beginnings of life in the year with the first snowdrop, to be followed by the crocus, and shortly after by the budding of the earliest trees. It should be possible for him to know and, if he will, see for himself the trees and other plants flowering and seeding in due season.

It may be said that this will be difficult of realisation in the densely populated poorer quarters of the town. May I tell one more small story which I think points a way?

Some years ago I was stationed in Darjeeling, in the eastern Himalaya. Darjeeling is a town of considerable size, the summer headquarters of the Government of Bengal, and possesses one of the great views of the world, the superb snowy giant Kinchin Junga, to see which and Mount Etna beyond all devout tourists to India make a pilgrimage. The town is situated on a ridge and outlying spurs, the houses embosomed in Cryptomerias, oaks, and other hardwoods. Beautiful as is the place in itself, with its incomparable setting of eternal snows, it came to be recognised that much could be done with the object of beautifying the station. Some of the roads were without trees, the banks and slopes between them overgrown with a tangled jungle growth; the gardens of the houses left much to be desired in many respects; the roads of the bazaar were dirty, and the offshoot paths overgrown with a matted mass of undergrowth, the home and breeding grounds of pestilential flies and microbes. At the instance of the Lieutenant-Governor, the late Sir John Woodburn, K.C.S.I., as fine and broad-minded a type of the British official as could be found anywhere, a motion was set on foot which had for its object identical aims with those, or some of them, the present Town Planning Exhibition is setting before the public—the beautifying of the town so as to render it a better dwelling place for those who had to spend their lives, or a portion of their lives, there. The question, once mooted, was taken up with enthusiasm; and it must be remembered that, as in Quetta, the population concerned mainly consisted of men who would only pass an uncertain number of years in the station, a transfer or final retirement home ending their connection with it. In Darjeeling a strong committee was formed, on which the Government, the municipality, the local bar,

merchants, house owners, and private individuals, British and Indian alike, were represented.

The Government recognised, as was pointed out by the Lord Provost at Lord Pentland's speech the other day, that it was not to the municipality (that is, corporation or town council) alone that it should look for the carrying out of the scheme—that the whole responsibility did not rest with the municipality alone. Whilst recognising the necessity of the municipality being the first to move in the matter and promise its support, it was pointed out that every householder in the town had equally a duty to perform in aiding the scheme, and that no scheme could be complete or effectual unless each householder recognised such duty and was prepared to give solid help to further the ends in view. Donations and aid were asked for by the committee from the Government, municipality, and also from the householders, and were forthcoming from each quarter. The committee then proceeded to lay down in broad general lines its recommendations for giving effect to Sir John Woodburn's ideas, and these recommendations dealt with the widening of roads, constructing new roads, building up retaining walls to keep up banks and slopes, planting trees either as avenues or in groups or single trees, the pruning of existing trees which required such work, cutting unsightly undergrowth from banks and slopes and grassing such, cleaning up the gardens of such householders as could not afford to do the work, and in making provision for giving out seed or trees and shrubs where necessary.

The broad principles of the work having been laid down, a strong working committee was appointed, and the whole of the work done in the station in the year I am dealing with was done by that working committee. Householders who were well off were asked to consult personally the working committee as to the details of the improvements to be carried out in their own gardens in so far as they affected the external appearance of the town, and to carry out the recommendations made themselves. They were also asked to aid the working committee by donating seed and plants to be planted in the gardens of the poorer classes. This work was done by the staff of the working committee, and under the personal superintendence of the latter. It was a common sight during that spring, summer, and autumn to see members of the committee supervising work for a couple of hours before breakfast in the morning, men who would be spending the rest of the day in their offices engaged in their ordinary daily pursuits. As a result, the improvement in the appearance of the station was astounding, and fully repaid the time and labour spent on it.

I have quoted this example at some length because it shows that the question of the improvement of a town, and more especially the poorer and more squalid parts of a town, is no Utopian scheme. It should be quite possible to institute similar committees in every large city and town of this country. In the case of the larger ones, such as London, for instance, each local district could have its own local working committee once the broad lines of policy had been laid down.

Here in Edinburgh a working planting subcommittee of the town planning committee might be formed to look after the beautifying of the city so far as such could be advanced by planting work. For the poorer quarters of the town a definite scheme of planting, by which I mean not only the planting of trees and shrubs, but also the formation and upkeep of grass and flowers, should be laid down and worked up too, as funds allowed, it being a *sine qua non* that only such work should be taken in hand as could be looked after and kept up in years to come. To plant a row or avenue of trees and then leave it to take its chance, usually an extremely poor one, of reaching maturity, is to throw away good money. Similarly, to plant areas of grass and leave them to become refuse and rubbish heaps or mud flats is merely to add to the squalor and untidiness of a neighbourhood. For the dwellings of the wealthier inhabitants, advice would be offered when demanded or suggestions made when it was desired to obtain uniformity of treatment in a particular locality or neighbourhood, or when the planting of a group of trees in a garden would afford a pleasing amenity for a neighbouring poorer locality. In the public streets the subcommittee should be given a free hand so far as

tree planting and the formation of grass plots went. I have mentioned above how a street such as George Street, for instance, which has great breadth, could be beautified by an avenue of trees such as black poplars, or sycamores, or elms. In other parts of the city, horticulturists are of opinion that thorns and the service tree might be used, whilst in sheltered situations I should like to try the plane, lime, and even the horse-chestnut. I should like to go into greater detail on what might be attempted in Edinburgh on this head, but for one thing time will not permit of it, and for the other I should require to make a closer survey of the city in this respect than I have yet had opportunity to do.

There is one other point, however, in connection with tree planting in towns which applies alike to Edinburgh and all growing cities and towns. It is concerned, not with tree planting, but with tree felling. It is difficult to speak too strongly in disapprobation of the indiscriminate and pernicious felling of trees which usually takes place when a new block of houses is to be built or a new road laid down. No effort is made to first mark out the foundations or alignment to ascertain whether the trees must come down or can be left to afford a pleasing amenity to the district. Perhaps for the gain of a few shillings or through ignorance or gross stupidity they are ruthlessly hacked down, a few hours destroying the work of a century, and the stumps remain a lasting source of regret to those inhabiting the district, for they can never hope in their time to replace the trees so mercilessly destroyed.

The first rule for a town planning committee to lay down should be that no trees on areas in which building extensions are to take place should be felled or killed without a special permission being previously obtained.

In conclusion, I could wish to point one moral with no uncertain note, and that is the great effect on the amenity of a district and on its inhabitants which tree growth exerts. A barren country is depressing, and has a like effect on mankind, resulting in the coarsening of human nature. Can one be surprised at the low scale of morality and the absence of the finer instincts of human nature generally associated with coal-mining districts when one remembers that alike above and below the surface of the earth the miner finds everything black and lifeless? To merely travel through such a country is depressing. How much more so to live in it? And as it is with the Black Country, as it is called, so is it in the narrow street of the slums, where the blue sky is hidden by the smoke of the great city and plant life of all kinds is absent.

Give the people better homes to live in—it is a first desideratum—but with the houses give them the companions of their ancestors, the trees, the green grass, and the flowers, for there are species of each which, if properly looked after, will grow even in the murk of the great city.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

LONDON.—The Senate at its meeting on March 29 accepted the Galton bequest, and authorised the issue of an appeal for 15,000*l.* to defray the cost of the erection and equipment of a suitable building for the Eugenics Laboratory. Hitherto the laboratory has been housed in the applied mathematics department at University College.

The D.Sc. degree in chemistry was granted to Mr. T. P. Hilditch, an internal student of University College, for a thesis on the relation between chemical constitution and optical activity and other papers; and the degree of D.Sc. in geology was granted to Mr. A. M. Finlayson, an internal student of the Royal College of Science, for a thesis on the geology of ore deposits.

Dr. W. P. Herringham takes the place of Dr. H. A. Caley as a representative of the faculty of medicine on the Senate.

SHEFFIELD.—The council has made the following appointments, among others:—Mr. R. J. Pye-Smith, as emeritus professor of surgery; Mr. Arthur M. Connell, to the lectureship in surgery, which was rendered vacant through

Dr. Sinclair White's appointment to the professorship of surgery; and Mr. J. D. Fiddes to the demonstratorship in anatomy.

Prof. Beattie has been appointed representative of the University at the celebration of the 500th anniversary of the foundation of the University of St. Andrews, to be held on September 12–15.

DR. ALEXANDER SMITH has been appointed to the Mitchell chair of chemistry in Columbia University, New York, vacant by the retirement of Dr. C. F. Chandler. He is a Scotsman by birth, and graduated at Edinburgh in 1886. For a short time he was an assistant in chemistry at his *alma mater*. In 1890 he went to America, and has since held professorial posts at Wabash College and the University of Chicago. He is president of the American Chemical Society.

THE Joint Matriculation Board of the Universities of Manchester, Liverpool, Leeds, and Sheffield has arranged to examine pupils in the housewifery forms of 'girls' schools. The examination will be suitable for girls of sixteen years of age and upwards who have studied domestic subjects up to the standard of the school certificate examination. Candidates must offer, in addition to certain other subjects, elementary general science and cookery and two of the following:—housewifery, laundry, needlework and drawing, elementary biology. There will be a practical examination in all domestic subjects.

In *The Economic Journal* for March Mr. W. M. J. Williams deals with the subject of Exchequer grants, and establishes the need of inquisition and action upon the relation of national to local taxation. He urges that a term should be assigned to grants from the Exchequer, that a delimitation should be made of present grants, and that the whole should be settled with a due regard to economy and care by local authorities. Taking the education grants as an example, he considers the problem of a settlement of the relation to be established between national and local finance. We may assume, he says, that the cost of education publicly provided in the United Kingdom is about twenty-seven to thirty millions sterling. Some one half is derived from national sources, and one half of the cost is borne by local authorities, but in addition the central authority bears the cost of central administration and of grants to educational institutions of various kinds. The quota of the cost borne by taxes has grown very considerably since 1870, and local authorities demand that all education charges shall be borne by the Exchequer. In another place he points out that the same public local authority gets sums of money for educational purposes from two departments of State. Altogether, he makes out a strong case for the separation of national and local taxation and finance.

THE Legislature of the State of Utah, during its recent session, made an appropriation of 60,000*l.* to the State University for the construction of the main building of the institution. This building is, says *Science*, to house the general library, the art gallery, and the administrative offices. The Legislature also passed a Bill, which has become a law, putting the support of the university and the agricultural college on a permanent financial basis. At present the annual income of the university for general maintenance is about 40,000*l.* New buildings and other constructions are to be provided by special appropriations. The Legislature of Indiana has, we learn from the same source, appropriated nearly 40,000*l.* to Indiana University for the next biennium. This grant includes 30,000*l.* additional maintenance. According to the American Press, a graduate of the Philadelphia College of Pharmacy, whose name has been withheld, has offered to give 200,000*l.* toward the erection of a comprehensive group of three buildings, one of which shall be specially devoted to research work, for the institution. *Science* also records that Mrs. Benjamin Hicks, of Old Westbury, N.Y., has bequeathed 20,000*l.* to Swarthmore College, and that Columbia University has received the sum of 138,600*l.* from the executors of the estate of the late Mr. George Crocker, for the establishment of the Crocker Cancer Research Fund.